



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1402; Project Identifier MCAI-2022-01094-R; Amendment 39-22227; AD 2022-22-12]

RIN 2120-AA64

Airworthiness Directives; Bell Textron Inc., Erickson 214 Holdings, LLC, Leonardo S.p.a., and Various Restricted Category Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bell Textron Inc., Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters; certain Erickson 214 Holdings, LLC, Model 214B and 214B-1 helicopters; certain Leonardo S.p.a. Model AB412 and AB412 EP helicopters; and certain various restricted category helicopters. This AD was prompted by reports of two in-service failures of forward crosstubes due to fatigue damage and the issuance of newly established life limits. This AD requires determining the total number of landings on certain part-numbered forward crosstubes and incorporating requirements (airworthiness limitations) into existing maintenance records. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1402; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada; telephone 1 613 632 5200; email support@dartaero.com; Internet [dartaerospace.com](https://www.dartaerospace.com).

- You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1402.

FOR FURTHER INFORMATION CONTACT: Elizabeth Dowling, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7300; email 9-AVS-NYACO-COS@FAA.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include

“Docket No. FAA-2022-1402; Project Identifier MCAI-2022-01094-R” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Elizabeth Dowling, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7300; email 9-AVS-NYACO-COS@FAA.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Transport Canada, which is the aviation authority for Canada, issued Transport Canada AD CF-2022-46, dated August 12, 2022 (Transport Canada AD CF-2022-46), to correct an unsafe condition for Bell Textron Inc., Model 204B, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, and 412 EP helicopters, which are modified in accordance

with Transport Canada Supplemental Type Certificate (STC) SH01-9 and installed with Dart Aerospace Ltd. high gear forward crosstube part number (P/N) D212-664-101 or P/N D212-664-101B. Transport Canada advises of reports of two in-service failures of Dart Aerospace Ltd. forward crosstube P/N D212-664-101 on Bell Textron Inc., Model 412 helicopters. Transport Canada further advises the forward crosstube fractured during landing, and both failures were due to fatigue damage and involved forward crosstubes which had accumulated more than 20,000 landings.

Additionally, Transport Canada advises if a forward crosstube fails without timely mitigating action from the pilot during landing, the helicopter could contact the ground causing damage to the fuselage and injury to occupants. Transport Canada advises that Dart Aerospace Ltd., issued a revision to the Airworthiness Limitations Section (ALS) of its Instructions for Continued Airworthiness, which establishes a new lift limit for forward crosstubes P/N D212-664-101 and P/N D212-664-101B.

Accordingly, Transport Canada AD CF-2022-46 requires incorporating the newly established airworthiness limitations for forward crosstubes P/N D212-664-101 and P/N D212-664-101B by amending Chapter 4 Airworthiness Limitations of Dart Aerospace Ltd., ICA-D212-664 by inserting Revision 12, dated September 30, 2021. Transport Canada AD CF-2022-46 also requires removing forward crosstubes P/N D212-664-101 and P/N D212-664-101B with more than 20,000 landings from service and allows the use of superseding or later revisions of the ALS that are approved by Transport Canada.

FAA STC No. SR01298NY approves the installation of forward crosstubes P/N D212-664-101 and P/N D212-664-101B on Bell Textron Inc., Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters; Erickson 214 Holdings, LLC, Model 214B and 214B-1; Leonardo S.p.a. Model AB412 and AB412 EP helicopters; and restricted category Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P helicopters. Accordingly, this AD applies to those model helicopters.

You may examine Transport Canada AD CF-2022-46 in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1402.

Related Service Information under 1 CFR Part 51

The FAA reviewed Chapter 4 – Airworthiness Limitations (04-00-00), approved March 23, 2022, of Dart Aerospace Ltd., Instructions for Continued Airworthiness, ICA-D212-664, Crosstube Installation, Revision 12, dated September 30, 2021 (Dart ICA-D212-664 Rev 12). This service information specifies life limits for various part-numbered crosstubes. This revision of the service information adds a newly established life limit for forward crosstubes P/N D212-664-101 and P/N D212-664-101B.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

FAA’s Determination

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with Canada, Transport Canada, its technical representative, has notified the FAA of the unsafe condition described in its AD. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other helicopters the same type designs.

AD Requirements

This AD requires determining the total number of landings on forward crosstubes P/N D212-664-101 and P/N D212-664-101B, and if the total number of landings cannot be determined, calculating the total number of landings. For a forward crosstube that has accumulated 20,000 or more total landings or if the total number of landings cannot be calculated, this AD requires removing the forward crosstube from service. This AD also requires incorporating requirements (airworthiness limitations) into existing maintenance records, which are identified in Dart ICA-D212-664 Rev 12, as described previously.

ADs Mandating Airworthiness Limitations

The FAA has previously mandated airworthiness limitations by mandating each airworthiness limitation task (e.g., inspections and replacements (life limits)) as an AD requirement or issuing ADs that require revising the ALS of the existing maintenance manual or instructions for continued airworthiness to incorporate new or revised inspections and life limits. This AD, however, requires operators to incorporate into

maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2), as applicable for your rotorcraft, the requirements (airworthiness limitations) identified in the ALS service information, as described previously. The FAA does not intend this as a substantive change. For these ADs, the ALS requirements for operators are the same but are complied with differently. Requiring the incorporation of the new ALS requirements into the existing maintenance records, rather than requiring individual ALS tasks (e.g., repetitive inspections and replacements), requires operators to record AD compliance once after updating the maintenance records, rather than after every time the ALS task is completed.

Differences Between this AD and the Transport Canada AD

Transport Canada AD CF-2022-46 applies to Bell Textron Inc. Model 204B, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, and 412 EP helicopters which are modified in accordance with Transport Canada STC SH01-9 and installed with Dart Aerospace Ltd. high gear forward crosstube P/N D212-664-101 or P/N D212-664-101B; whereas, this AD applies to Bell Textron Inc., Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters; Erickson 214 Holdings, LLC, Model 214B and 214B-1 helicopters; Leonardo S.p.a. Model AB412 and AB412 EP helicopters; and all restricted category Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P helicopters, with Dart Aerospace Ltd. high gear forward crosstube P/N D212-664-101 or P/N D212-664-101B installed under (FAA) STC No. SR01298NY.

This AD requires determining the total number of landings on an affected forward crosstube, defines what is considered a “landing” for the purposes of this AD, requires a particular method to calculate the total number of landings if it cannot be determined, and requires removing an affected forward crosstube for which the total number of landings cannot be determined from service, whereas, Transport Canada AD CF-2022-46 does not contain that information or those actions. Transport Canada AD CF-2022-46 allows the use of superseding or later revisions of Dart ICA-D212-664 Rev 12 that are approved by Transport Canada, whereas this AD does not because referring to documents that do not

exist at the time a final rule is published violates Office of the Federal Register (OFR) regulations regarding approval of materials “incorporated by reference” in rules.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because the forward crosstube is a component of a helicopter’s landing gear and is critical to the control of the helicopter during landing. The FAA also has no information pertaining to the number of forward crosstubes that have already met or exceeded the newly established life limit, and fatigue beyond allowable limits of a forward crosstube could lead to instantaneous failure at any time without any previous indications. In light of this, the initial actions required by this AD must be accomplished before further flight. This compliance time is shorter than the time necessary for the public to comment and for publication of the final rule. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forego notice and comment.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and

comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects up to 594 helicopters of U.S. registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Determining the total number of landings on an affected forward crosstube takes about 0.5 work-hour for an estimated cost of \$43 per helicopter and up to \$25,542 for the U.S. fleet. Removing an affected forward crosstube from service and replacing it with an airworthy part takes about 8 work-hours and parts cost about \$6,487 for an estimated cost of \$7,167 per helicopter. Incorporating requirements (airworthiness limitations) into existing maintenance records takes about 2 work-hours for an estimated cost of \$170 per helicopter and up to \$100,980 for the U.S. fleet.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-22-12 Bell Textron Inc., Erickson 214 Holdings, LLC, Leonardo S.p.a., and

Various Restricted Category Helicopters: Amendment 39-22227; Docket

No. FAA-2022-1402; Project Identifier MCAI-2022-01094-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the helicopters identified in paragraphs (c)(1) through (4) of this AD with a Dart Aerospace Ltd. high gear forward crosstube part number (P/N) D212-664-101 or P/N D212-664-101B installed under Supplemental Type Certificate No. SR01298NY:

(1) Bell Textron Inc., Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters, certificated in any category;

(2) Erickson 214 Holdings, LLC, Model 214B and 214B-1 helicopters, certificated in any category;

(3) Leonardo S.p.a. Model AB412 and AB412 EP helicopters, certificated in any category; and

(4) Various restricted category helicopters:

(i) Model HH-1K helicopters; current type certificate holders include, but are not limited to, Rotorcraft Development Corporation;

(ii) Model TH-1F helicopters; current type certificate holders include, but are not limited to, Robinson Air Crane Inc.; Rotorcraft Development Corporation; and Tamarack Helicopters, Inc.;

(iii) Model TH-1L helicopters; current type certificate holders include, but are not limited to, Bell Textron Inc.; Overseas Aircraft Support, Inc.; and Rotorcraft Development Corporation;

(iv) Model UH-1A helicopters; current type certificate holders include, but are not limited to, Richards Heavylift Helo, Inc.;

(v) Model UH-1B helicopters; current type certificate holders include, but are not limited to, International Helicopters, Inc.; Overseas Aircraft Support, Inc.; Red Tail Flying Services, LLC; Richards Heavylift Helo, Inc.; Rotorcraft Development Corporation; Southwest Florida Aviation International, Inc.; and WSH, LLC (type certificate previously held by San Joaquin Helicopters);

Note 1 to paragraph (c)(4)(v): Helicopters with an SW204 or SW204HP designation are Southwest Florida Aviation International, Inc., Model UH-1B helicopters.

(vi) Model UH-1E helicopters; current type certificate holders include, but are not limited to, Bell Textron Inc.; Overseas Aircraft Support, Inc.; Rotorcraft Development Corporation; Smith Helicopters; and West Coast Fabrications;

(vii) Model UH-1F helicopters; current type certificate holders include, but are not limited to, AST, Inc.; California Department of Forestry; Robinson Air Crane, Inc.; Rotorcraft Development Corporation; and Tamarack Helicopters, Inc.;

(viii) Model UH-1H helicopters; current type certificate holders include, but are not limited to, Arrow Falcon Exporters, Inc.; Global Helicopter Technology, Inc.; Hagglund Helicopters, LLC; JJASPP Engineering Services LLC; Northwest Rotorcraft, LLC; Overseas Aircraft Support, Inc.; Richards Heavylift Helo, Inc.; Rotorcraft

Development Corporation; Southwest Florida Aviation International, Inc.; and Tamarack Helicopters, Inc.;

Note 2 to paragraph (c)(4)(viii): Helicopters with an SW205 designation are Southwest Florida Aviation International, Inc., Model UH-1H helicopters.

(ix) Model UH-1L helicopters; current type certificate holders include, but are not limited to, Bell Textron Inc.; Overseas Aircraft Support, Inc.; and Rotorcraft Development Corporation; and

(x) Model UH-1P helicopters; current type certificate holders include, but are not limited to, Robinson Air Crane, Inc.; and Rotorcraft Development Corporation.

(d) Subject

Joint Aircraft System Component (JASC) Code: 3222, Nose/Tail Landing Gear Structure/Axle.

(e) Unsafe Condition

This AD was prompted by reports of two in-service failures of forward crosstubes due to fatigue damage and the issuance of newly established life limits. The FAA is issuing this AD to prevent failure of a forward crosstube, which could result in collapse of the landing gear and subsequent loss of control of the helicopter during landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

(1) Before further flight after the effective date of this AD, accomplish the actions in paragraph (g)(1)(i) and (ii) of this AD.

(i) Determine the total number of landings on the forward crosstube. For the purposes of this AD, a landing is counted anytime a helicopter contacts the ground regardless of the duration of the landing and regardless of whether the engine is shutdown. If the total number of landings cannot be determined, calculate the total number of landings by multiplying the total hours time-in-service on the forward crosstube by 10.

(ii) For a forward crosstube that has accumulated 20,000 or more total landings or if the total number of landings of a forward crosstube cannot be calculated as required in

paragraph (g)(1)(i) of this AD, before further flight, remove the forward crosstube from service.

(2) Within 30 days after the effective date of this AD, incorporate into maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2), as applicable for your helicopter, the requirements (airworthiness limitations) specified in Chapter 4 – Airworthiness Limitations (04-00-00), approved March 23, 2022, of Dart Aerospace Ltd., Instructions for Continued Airworthiness, ICA-D212-664, Crosstube Installation, Revision 12, dated September 30, 2021.

(h) Provisions for Alternative Requirements (Airworthiness Limitations)

After the actions required by this paragraph (g)(2) of this AD have been done, no alternative actions and associated thresholds and intervals, including life limits, may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Elizabeth Dowling, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7300; email 9-AVS-NYACO-COS@FAA.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Chapter 4 – Airworthiness Limitations (04-00-00), approved March 23, 2022, of Dart Aerospace Ltd., Instructions for Continued Airworthiness, ICA-D212-664, Crosstube Installation, Revision 12, dated September 30, 2021.

(ii) [Reserved]

(3) For service information identified in this AD, contact Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada; telephone 1 613 632 5200; email support@dartaero.com; Internet dartaerospace.com.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on October 21, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-24342 Filed: 11/3/2022 4:15 pm; Publication Date: 11/7/2022]